

Case Study – 2015 Tianjin Explosion

Overview of the 2015 Tianjin Explosions

- A series of explosions that occurred at a hazardous chemical storage facility for calcium carbide, sodium nitrate, and potassium nitrate.
- First fire was reported at around 22:50 local time (14:50 UTC) on 08/12.
- 1st explosion: 15:30 UTC, 3 tons of TNT.
- 2nd explosion occurred 30s later: 21 tons of TNT
- 8 additional explosions occurred on 08/15.
- Further random explosions occurred throughout August



<https://www.youtube.com/watch?v=9aw2aZm6l3Q>

Source: Reuters

*Hospitals not comprehensive of all in area.

J. Wang, 13/08/2015

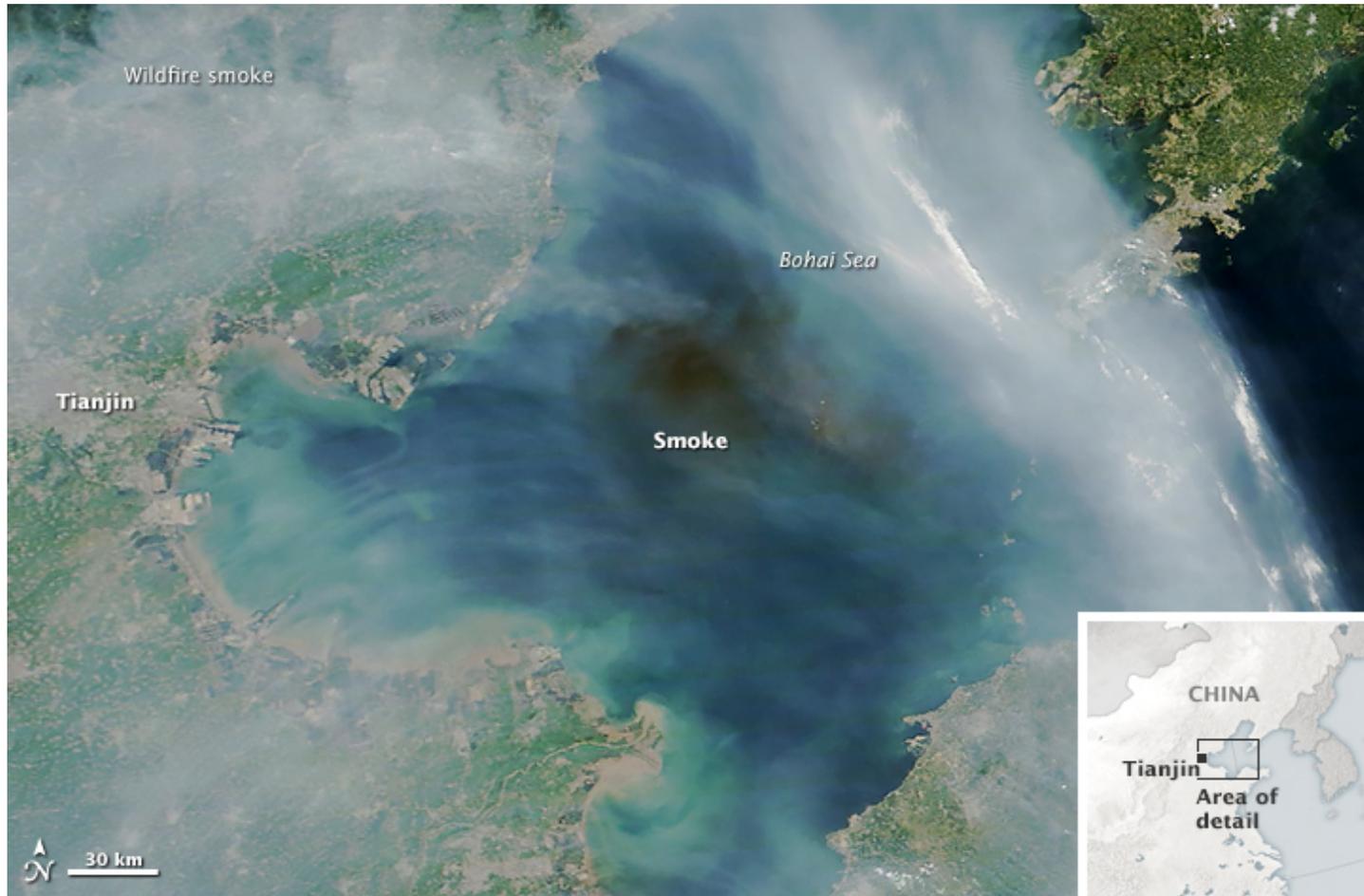
REUTERS

Overview of the 2015 Tianjin Explosions (Continued)

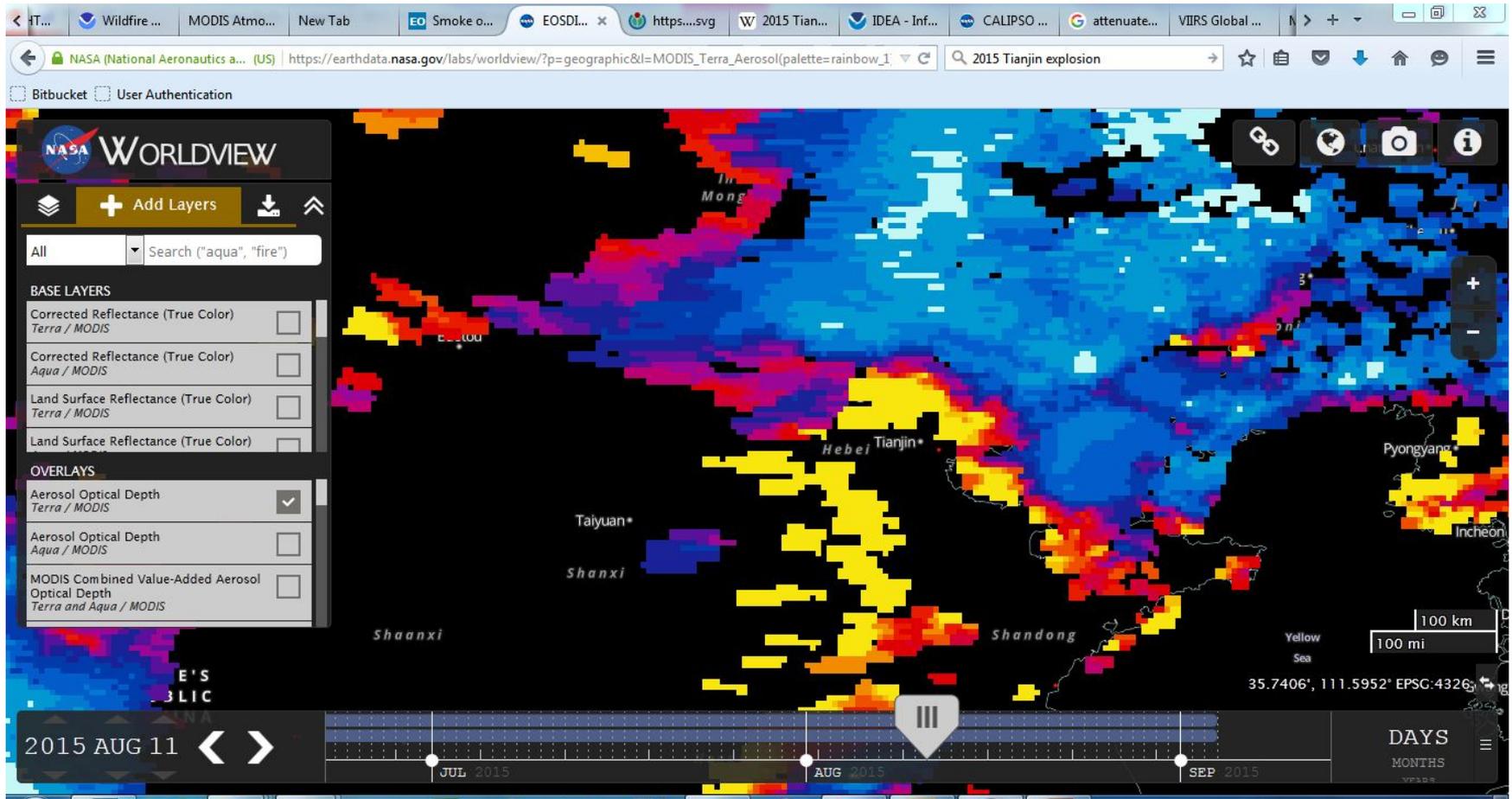
159 people were killed and 15 people are still missing, of which 115 are fire fighters and policemen. Hundreds were injured.



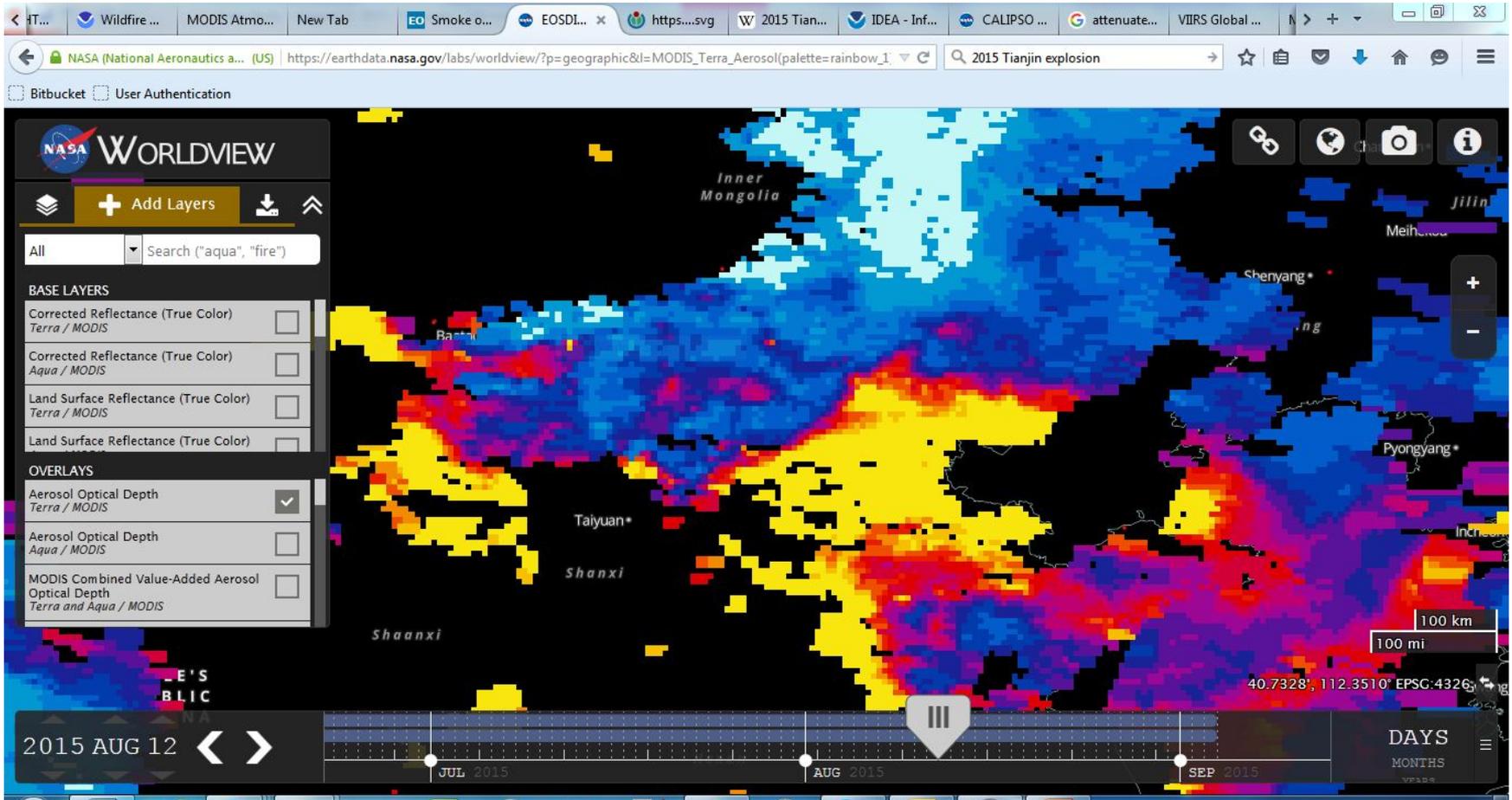
Aug. 12, 2015



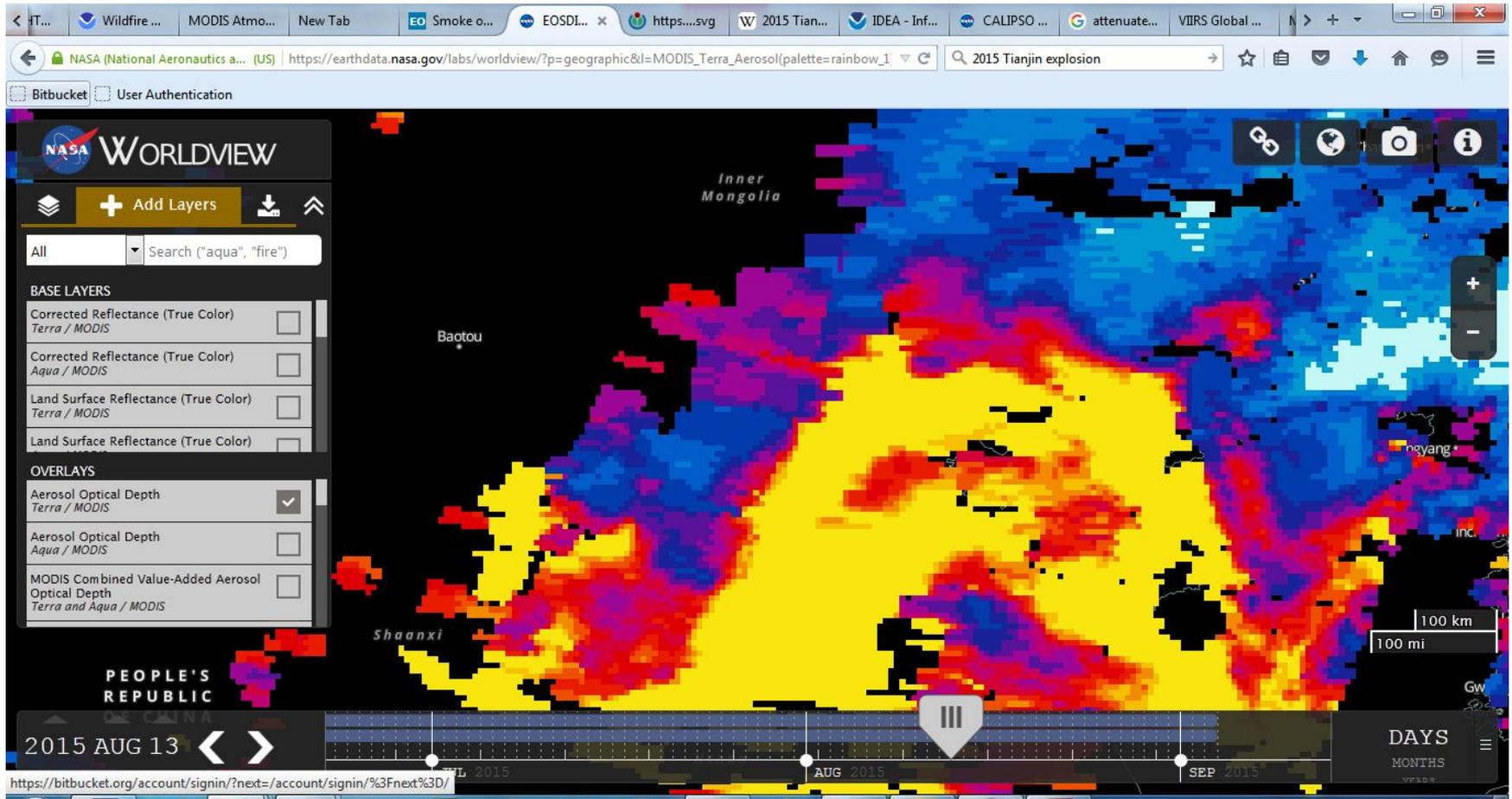
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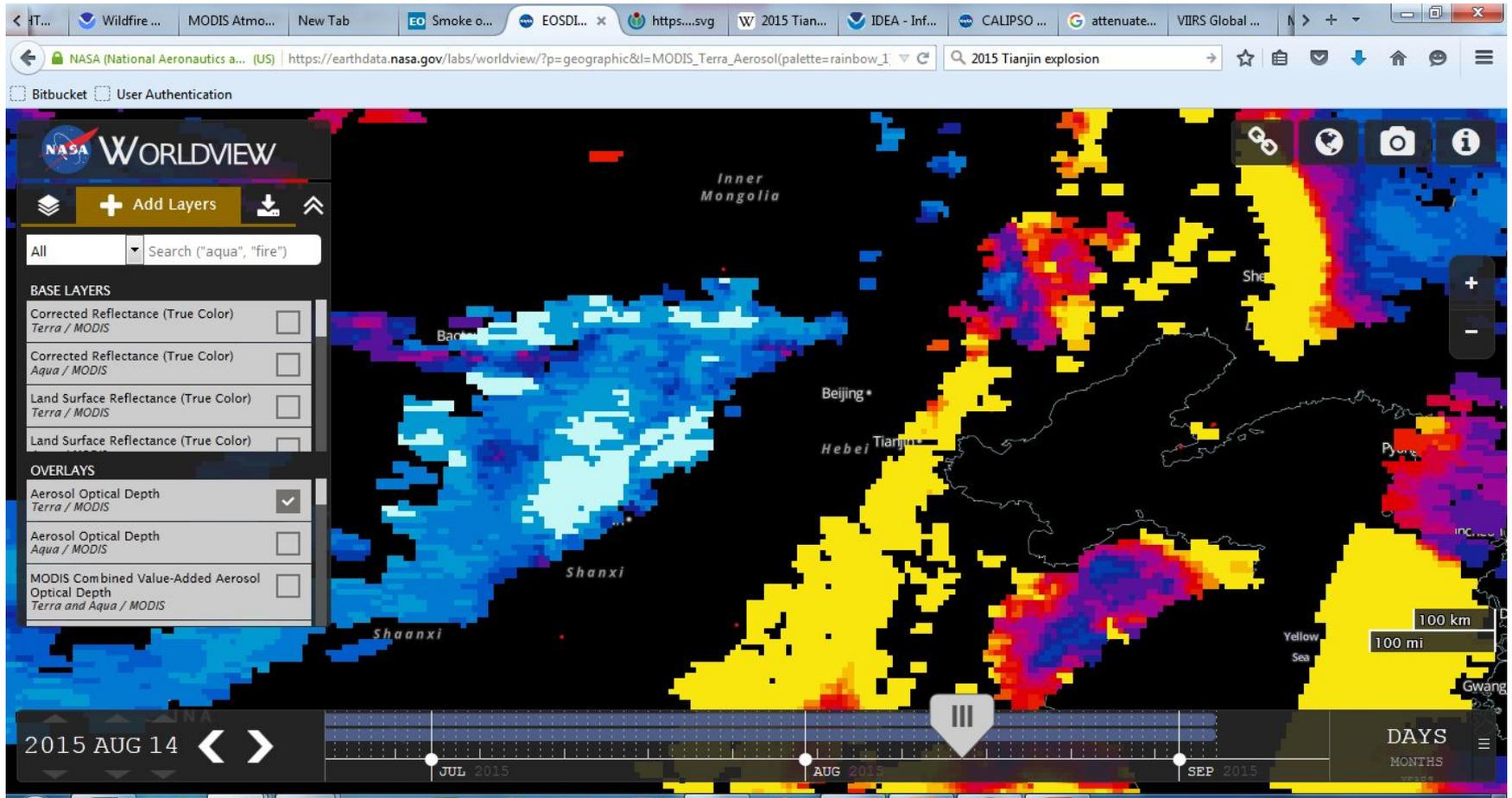
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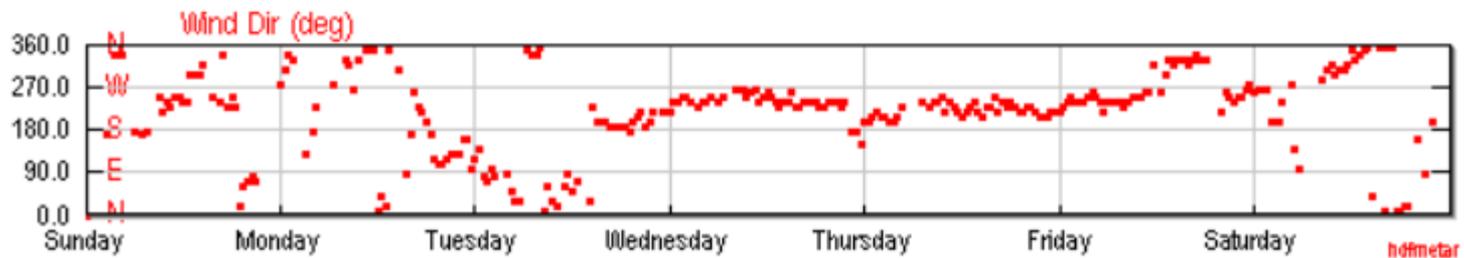
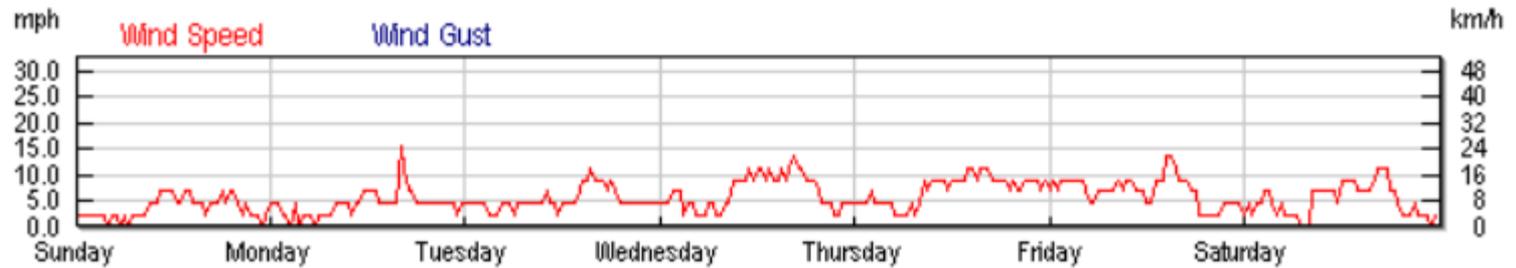
Aug. 13, 2015



Aug. 14, 2015



Meteorology Condition

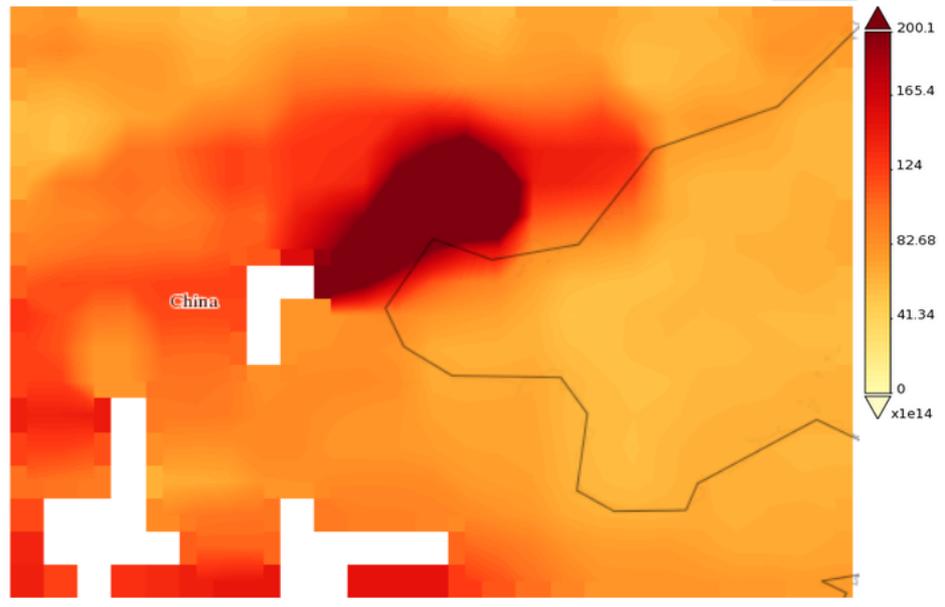


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1. [Animation](#)

NO2 Total Column (30% Cloud Screened) daily 0.25 deg. [OMI OMNO2d v003] 1/cm2, 2015-08-11 00:00

2 / 7 2015-08-11 00:00 Frame Delay: 0.250s Go To: 2



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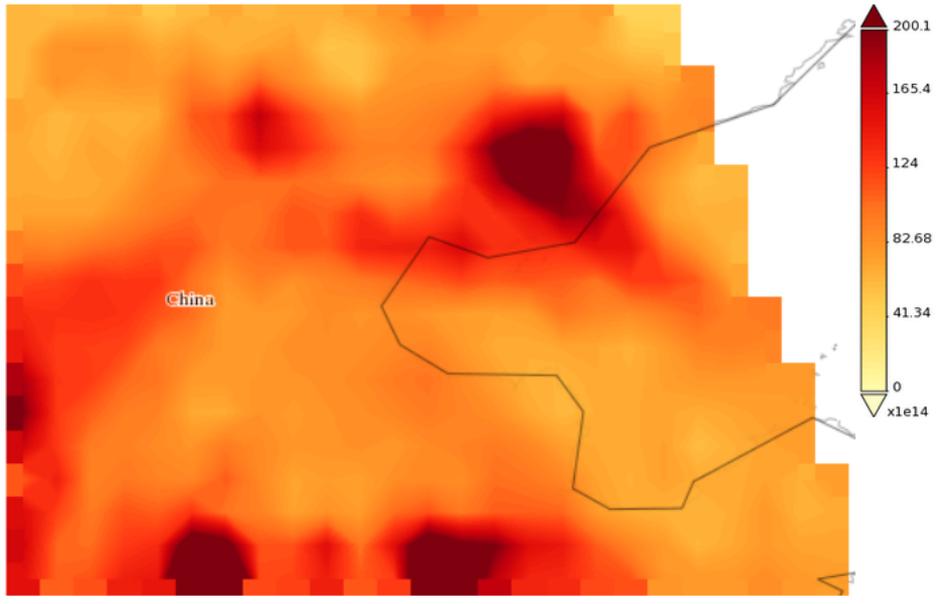
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1. Animation

NO2 Total Column (30% Cloud Screened) daily 0.25 deg. [OMI OMNO2d v003] 1/cm2, 2015-08-12 00:00

3 / 7 2015-08-12 00:00 Frame Delay: 0.250s Go To: 3



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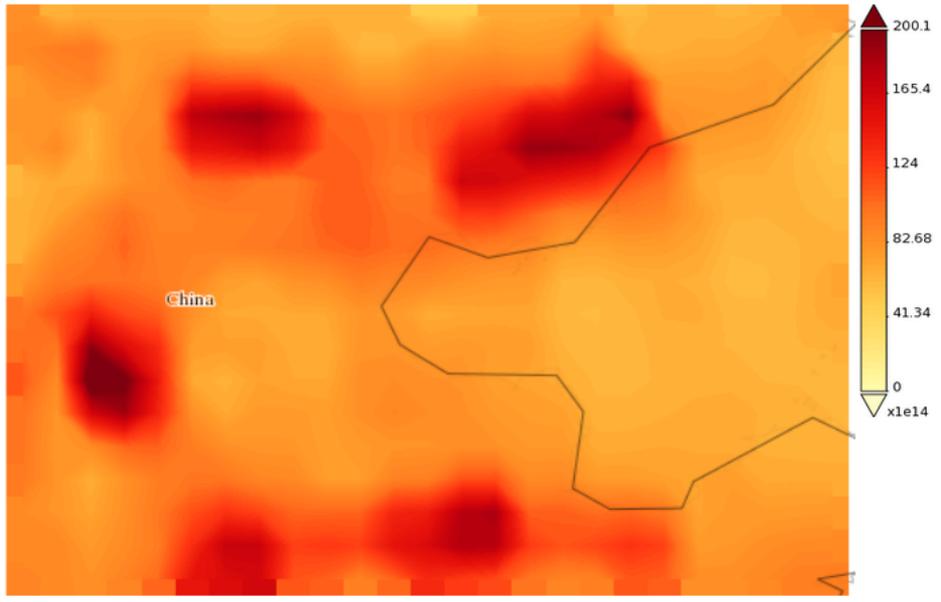
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4 / 7 2015-08-13 00:00 Frame Delay: 0.250s Go To: 4



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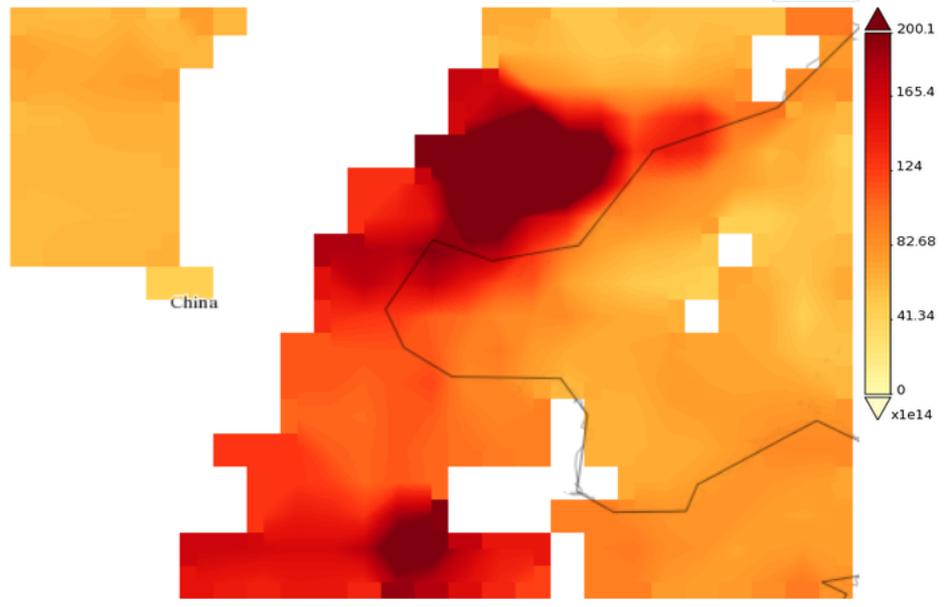
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NO2 Total Column (30% Cloud Screened) daily 0.25 deg. [OMI OMNO2d v003] 1/cm2, 2015-08-14 00:00

5 / 7 2015-08-14 00:00 Frame Delay: 0.250s Go To: 5



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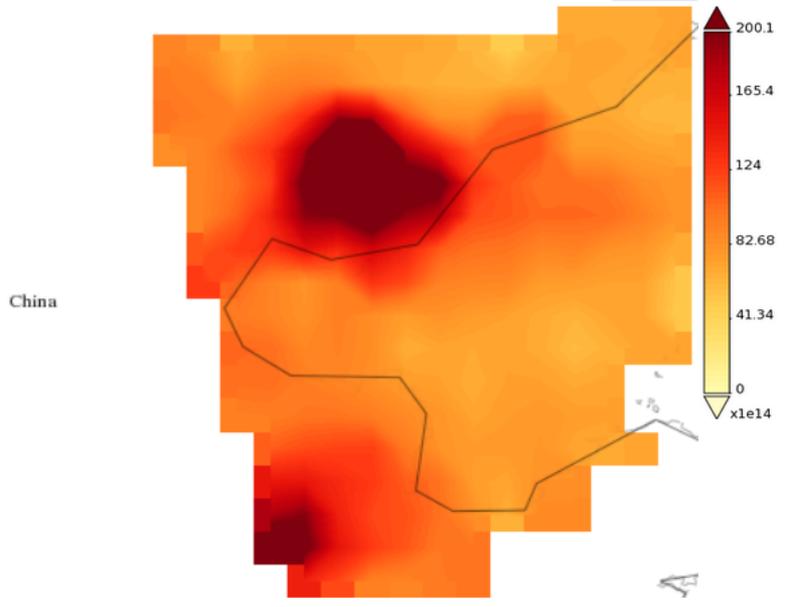


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NO2 Total Column (30% Cloud Screened) daily 0.25 deg. [OMI OMNO2d v003] 1/cm2, 2015-08-15 00:00

6 / 7 2015-08-15 00:00 Frame Delay: 0.250s Go To: 6



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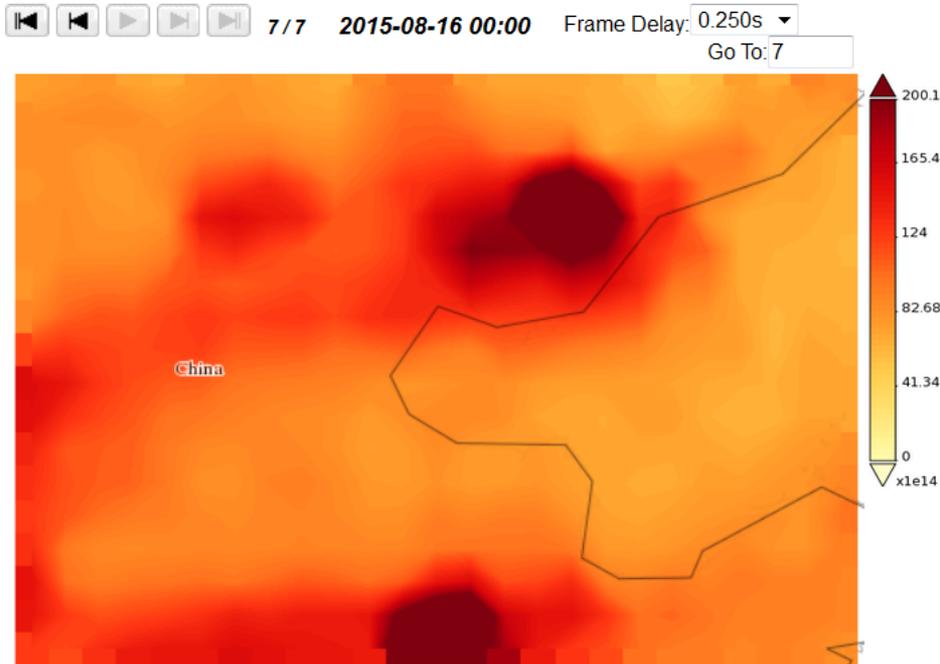
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- Selected date range was 2015-08-10 - 2015-08-16. Title reflects the date range of the granules that went into making this result.

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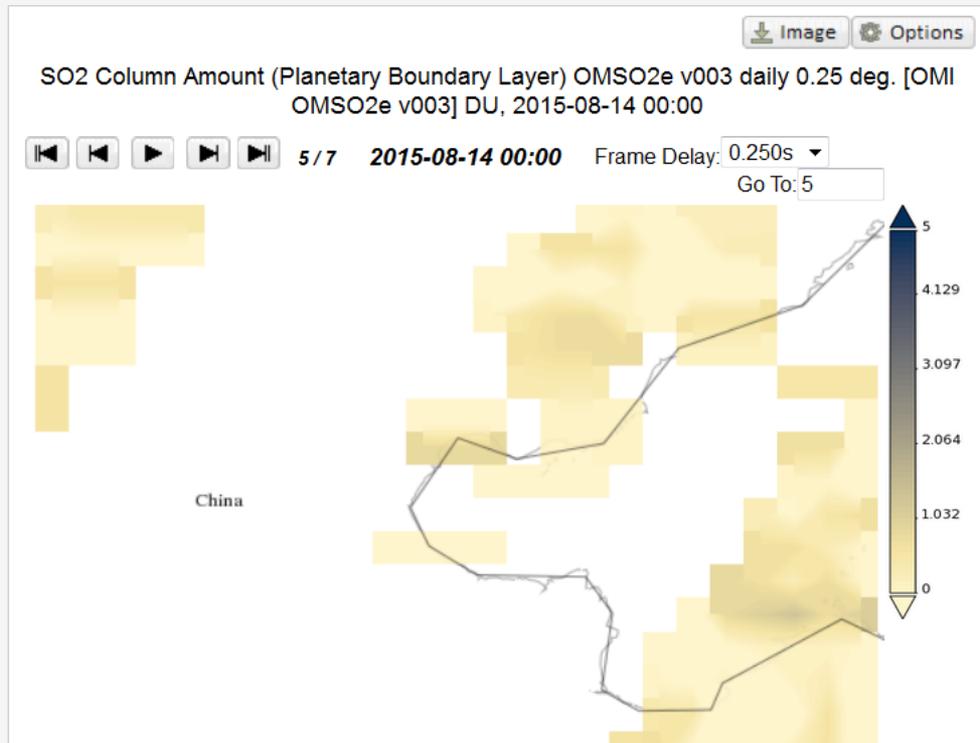


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4. Animation

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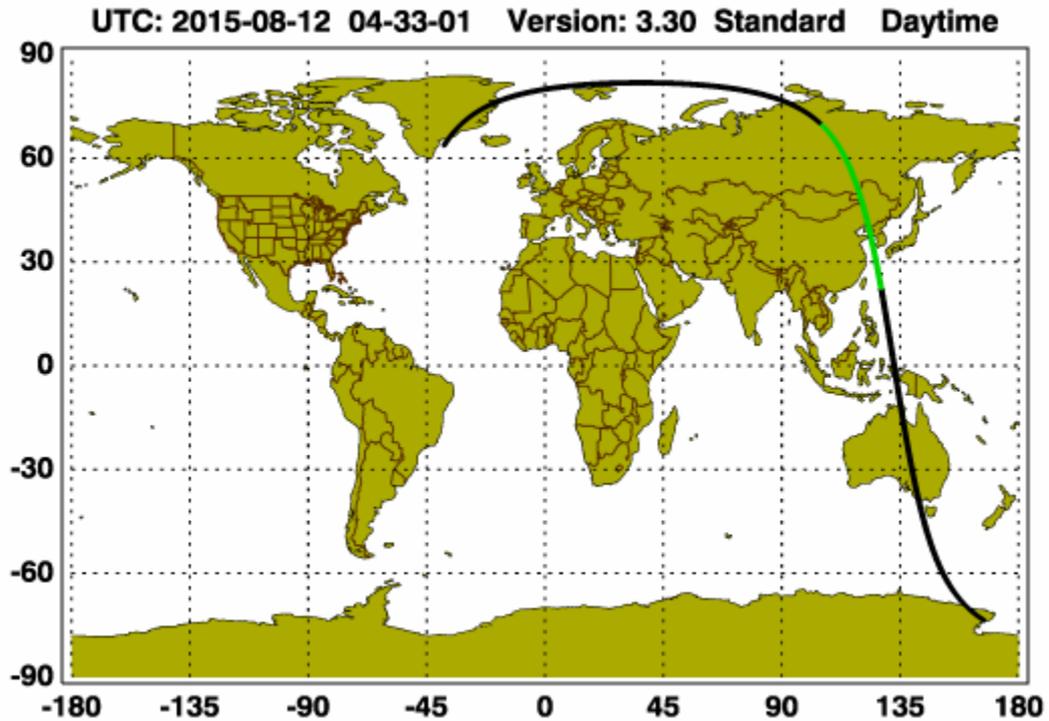


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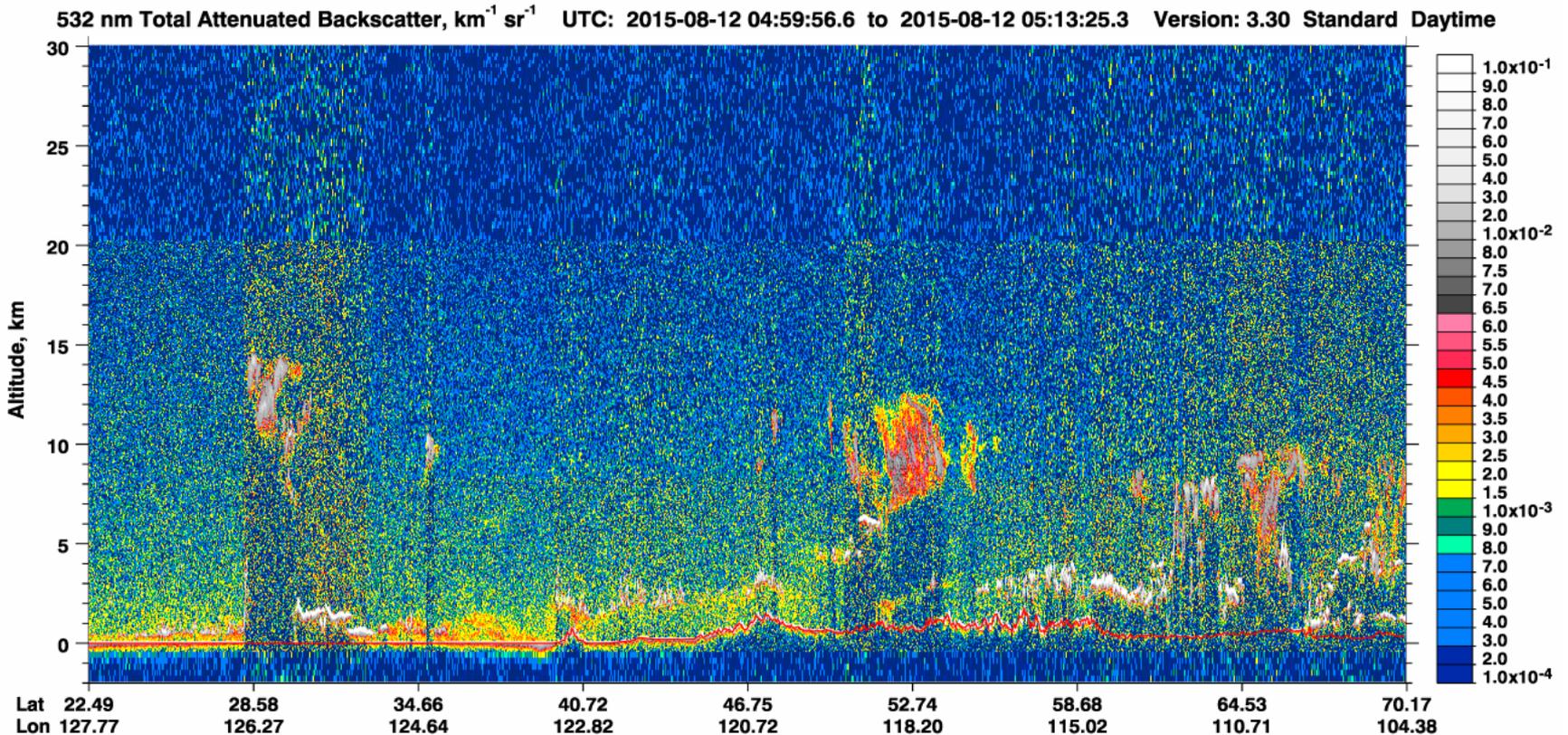
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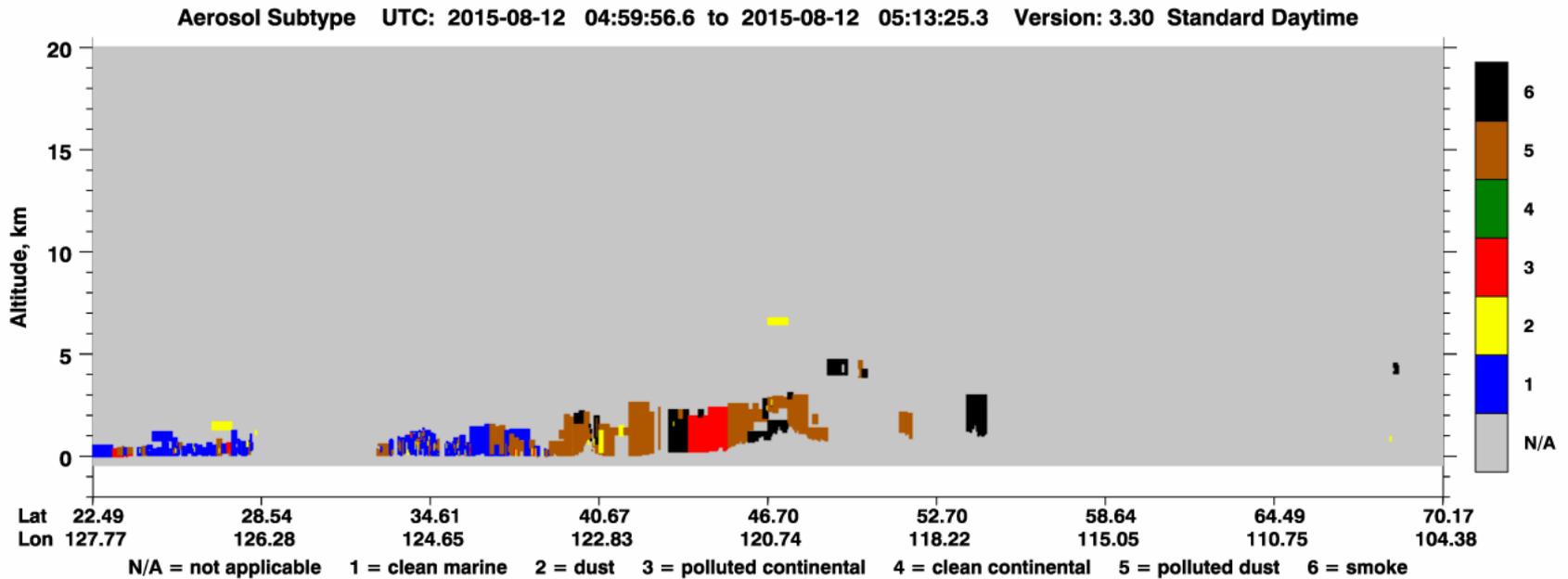
Calipso



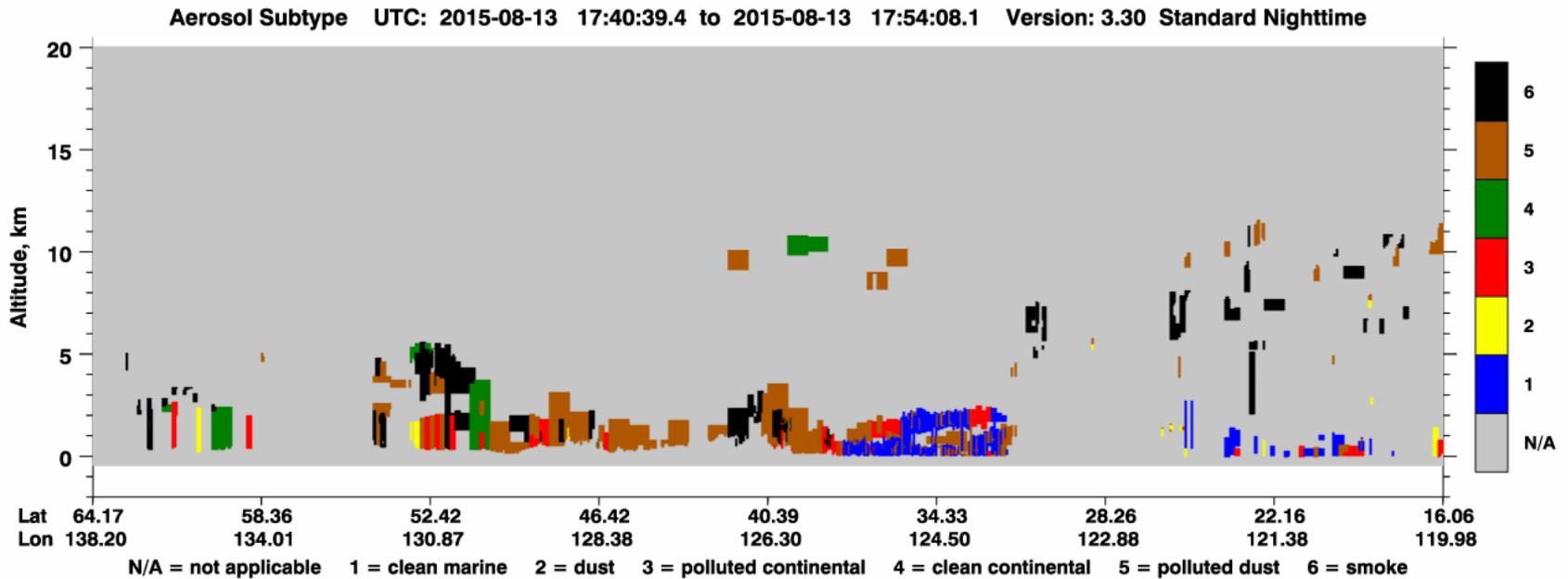
Calipso Total Backscatter: CALIPSO 532 nm Total (Parallel + Perpendicular) attenuated backscatter (/km/sr)



CALIPSO Aerosol Aug. 12



CALIPSO Aerosol Aug. 13



Giovanni AOD from MODIS Terra from 10th to 15th August 2015

